### **REMARKS**

Reconsideration of this application as amended is respectfully requested. In the Office Action claims 1, 3-11, 13-18, 20-22, 24-33, 35-43 and 45-50 are pending. Claims 1, 3-11, 13-18, 20-22, 24-33, 35-43 and 45-50 are rejected. By way of the present response Applicant has: 1) amended claims 1, 8, 15, 20, 27, 31, 33, 40 and 47; 2) added no new claims; and 3) canceled no claims. As such, claims 1, 3-11, 13-18, 20-22, 24-33, 35-43 and 45-50 remain pending. Applicants respectfully request reconsideration of the present application and the allowance of all claims now presented. Applicant submits no new matter has been added with applicant's claim amendments included herein.

#### I. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 8-11, 13, 14, 20-22, 24-26, and 47-50 are rejected under 35 U.S.C §103(a) as being unpatentable over Zwilling in view of Hitz, further in view of Senator. Applicant respectfully disagrees for the following independent reasons:

- 1. Zwilling expressly teaches away from Senator and vice versa; and
- 2. Zwilling expressly teaches away from the claimed invention.

# a. ARGUMENT 1: ZWILLING TEACHES AWAY FROM SENATOR AND VICE VERSA

The Office Action cites Zwilling as teaching the invention generally, but indicates that Zwilling does not expressly teach applicant's claimed limitation,

wherein each block of data is stored within a log as contiguous data in a sequential order and wraps around to the beginning of the log once the end is reached so that the size of the log does not increase beyond its originally created size.

Office Action, mailed Apr. 11, 2008, p. 29. However, the Office Action indicates that an analogous art, Senator, teaches the limitation. <u>Id</u>. at p. 30. The Office Action argues,

[i]t would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Hitz, Senator, and Zwilling before him/her to take the write anywhere file-system layout and the storage trees of snapshots from Hitz and the circular logs from Senator and <u>install it into the invention of Zwilling</u>.

Id. at p. 31 (emphasis added). The Office Action goes on to argue,

[t]he circular logs of Senator provide the obvious advantage of having bounded log sizes where the space for the log can be reused/reallocated upon use.

<u>Id</u>. However, it is respectfully submitted that a person of ordinary skill in the art at the time of the invention would <u>not</u> have combined Zwilling with Senator as indicated in the Office Action because Zwilling <u>expressly teaches away</u> from Senator and vice versa. Specifically, applicant does not believe it would have been obvious to a person of ordinary skill in the art

at the time of the invention having the teachings of Zwilling and Senator before him/her to install the circular log of Senator into the invention of Zwilling.

In order to argue its *prima facie* case of obviousness under 35 USC § 103 for the claim limitation,

wherein each block of data is stored within a log as contiguous data in a sequential order and wraps around to the beginning of the log once the end is reached so that the size of the log does not increase beyond its originally created size,

the Office Action attempts to combine the circular log of Senator with the method taught in Zwilling. However, as indicated by the Office Action, Senator teaches a circular <u>size-bounded</u> <u>file technique</u> for a computer system comprising circular log files. <u>See Office Action</u>, p. 31, 1st paragraph (emphasis added). That is, the technique described in Senator is to keep files bounded to their original size (i.e., the files in Senator do not increase beyond their originally allocated size). This is supported in Senator where it states,

[t]he circular file uses an inode field to identify the file as circular and writes fill data to the file to allocate physical blocks to the file at the time of its creation. Thereafter, <u>blocks already allocated to the file are re-allocated when more file space is needed and the file size does not increase</u>.

<u>Senator</u>, abstract (emphasis added). The fact that the file sizes in Senator do not increase beyond their original allocation is further supported in Senator where it states,

[t]hese and other advantages of the present invention are obtained by providing modifications to the file size definition and to physical space allocation modules so as to provide a fixed amount of circular file space in which the latest data is always available and only the oldest and least valuable data is discarded as new data is received from storage in a log.

<u>Id</u>. at col. 2, lines 3-10 (emphasis added). Thus, Senator is replete with language indicating that the file size is allocated once at creation, after which, the file sizes do not increase beyond their originally created size.

Zwilling, on the other hand, expressly teaches away from the teachings in Senator since the whole point of the method taught in Zwilling is for shrinking files that grow beyond their originally allocated size. This is supported in Zwilling where it states,

[t]his application is intended to cover any adaptations or variations of the present invention. For example, those of ordinary skill in the art will appreciate that <u>the shrink facility is applicable to any file system which allows files to grow above their originally created value</u>.

<u>see e.g.</u>, <u>Zwilling</u>, col. 14, lines 58-63 (emphasis added). It is respectfully submitted that, <u>at a minimum</u>, the method taught in Zwilling is limited to files that at least potentially grow beyond their originally allocated size. Further, it makes sense that Zwilling only applies to files which grow beyond their originally allocated size because shrinking files that grow in size is the specific problem the inventors in Zwilling were solving. <u>See e.g.</u>, Zwilling, col. 1, lines 22-46. The inventors of Zwilling were solving the problem of reducing unused space in files that grow beyond their originally allocated size. If the files never grew (or could not potentially

grow), then the problem Zwilling is solving would not exist; and therefore, there would be no need for the solution contained in the Zwilling reference.

As a result, applicant cannot agree with the Office Action's argument,

[t]he circular logs of Senator provide the obvious advantage of having bounded log sizes where the space for the log can be reused/reallocated upon use.

Office Action, p. 31. It is respectfully submitted that there would be <u>no</u> obvious advantage of installing Senator's <u>size-bounded</u> circular logs into Zwilling, because the whole point of Zwilling is to reduce file size of files that grow beyond their originally allocated size. Why would a person of ordinary skill in the art install a size-bounded circular log into an invention that was specifically designed to shrink unbounded files? To applicant, this is a <u>clear</u> teaching away.

Thus, it is respectfully submitted that the Zwilling and Senator references <u>cannot</u> be properly combined to support the Office Action's <u>prima facie</u> case of obviousness under 35 USC § 103. The Office Action has attempted to combine the Senator reference with the Zwilling reference by bringing together the circular files of Senator with the method taught in Zwilling. However, a person of skill in the art would not have combined the cited references in the way the Office Action has because Zwilling expressly teaches away from Senator and vice versa. Zwilling teaches shrinking unbounded files that grow beyond their originally

allocated size, whereas Senator teaches a technique using a size-bounded circular log file so that files do not grow beyond their originally allocated size. Applicant notes that the references cited by the Office Action contain the <u>exact opposite teachings</u>.

As a result, applicant believes that the Senator reference cannot be properly combined with the Zwilling reference since the references teach away from their combination. Under MPEP § 2145, it is improper to combine references where the references teach away from their combination. Therefore, applicant does not believe that the combination of Zwilling and Senator can be used to support the Office Action's prima facie case of obviousness under 35 USC § 103. Accordingly, reconsideration and withdrawal of the claim rejections is respectfully requested.

Additionally, under the same rationale as those articulated above, applicant believes that the combination cited by the Office Action is also improper for additional reasons including:

1. installing Senator into Zwilling would <u>change the principle of operation</u> of Zwilling, and, under MPEP § 2143.01, if a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious; and

2. installing Senator into Zwilling would <u>render Zwilling unsatisfactory for its intended</u>

<u>purpose</u>, and, under MPEP § 2143.01, if proposed modification would render the

prior art invention being modified unsatisfactory for its intended purpose, there is

no suggestion or motivation to make the proposed modification.

### b. Argument 2: Zwilling teaches away from the claimed invention

The Office Action has rejected applicant's claimed invention citing the combination of Zwilling and Hitz with Senator. However, it is respectfully submitted that Zwilling cannot properly be used to support the Office Action's *prima facie* case of obviousness under 35 USC § 103 because Zwilling *expressly teaches away* from the claimed invention. As discussed above, Zwilling expressly teaches away from files that do not increase beyond their originally allocated size. Zwilling teaches shrinking *unbounded files* that at least potentially grow beyond their originally allocated size, whereas the claimed invention specifically recites,

wherein each block of data is stored within a log as contiguous data in a sequential order <u>and wraps around to the beginning of the log once the end is reached so that the size of the log does not increase beyond its originally created size</u>.

Applicant notes, therefore, that the teaching in the Zwilling reference is also the <u>exact</u> <u>opposite</u> from applicant's claimed limitation.

Once again, to the applicant, this is a clear teaching away from the claimed invention, and under the MPEP, a prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness. MPEP § 2145 (emphasis added). Applicant submits that, if a cited reference expressly teaches away from a claim limitation, then how obvious could the claimed invention have been over the cited reference? Thus, applicant believes the Zwilling reference cannot properly be used to support the Office Action's *prima facie* case of obviousness under 35 USC § 103. Accordingly, reconsideration and withdrawal of the claim rejections is respectfully requested as well as withdrawal of the rejections of the corresponding dependent claims.

Respectfully Submitted,

## **CONCLUSION**

Applicant respectfully submits that all rejections have been overcome and that all pending claims are in condition for allowance. If there are any additional charges, please charge them to our Deposit Account Number 02-2666. If a telephone conference would facilitate the prosecution of this application, the Examiner is invited to contact Matt Hindman at (408) 720-8300.

Respectfully submitted,

**BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP** 

Date: May 16, 2008

Matthew W. Hindman

Attorney at Law Reg. No. **57,396** 

1279 Oakmead Pkwy Sunnyvale, CA 94085-4040 (408) 720-8300